



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/742,510	12/20/2000	Lothar Wenzel	5150-48000	8437
35690	7590	07/27/2004	EXAMINER	
MEYERTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.			VU, KIEU D	
P.O. BOX 398			ART UNIT	
AUSTIN, TX 78767-0398			PAPER NUMBER	
			2173	

DATE MAILED: 07/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/742,510	Applicant(s) WENZEL ET AL.	
	Examiner Kieu D Vu	Art Unit 2173	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

P riod for R ply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-10, 12-33, 35, 36, 38-40, 42, 43 and 45-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 6-10, 12-24, 28-33, 35, 36, 38-40, 42, 43, 45, 46 and 48-56 is/are rejected.
- 7) ☒ Claim(s) 25-27 and 47 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The Serial Number of the Application cited in line 9 of page 16 and line 28 of page 44 needs to be filled in.

Claim Objections

2. Claims 19, 25-27, and 47 are objected to since they contain typographical errors.

Regarding claim 19, the word "(Original)" after the period should be deleted.

Regarding claim 25, the underlined symbol in the term "constructed representation" should be deleted.

Regarding claim 47, the word "comprises" (second occurrence) should be changed to "comprise".

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-4, 6-10, 12-18, 20-24, 28-33, 35-36, 38-40, 42-43, 45-46, and 48-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan (USP 6453464) and McKaskle et al ("McKaskle", USP 5481741).

Regarding claims 1, 30, 38, and 48, Sullivan teaches steps for programmatically generating a second program (Java program) based on a first program (COBOL) program, comprising receiving information specifying the first program (see Fig. 2a,

Art Unit: 2173

reference number 12 Program-ID and reference number 14 Program name), the first program perform first functionality (inherent), wherein the first program is associated with a first programming development environment (COBOL programming development environment); and programmatically generating (programmatically translating; col 4, lines 37-49), the second program based on the information (col 5, lines 20-28) and the second program implements functionality of the first program (col 11, lines 3-5) wherein the second program is associated with a second programming development environment (Java programming development environment), wherein the second programming development environment is different from the first programming development environment (Java programming development environment is different from COBOL programming development environment). Sullivan differs from the claims in that Sullivan does not teach that the first program and the second program can be graphical programs which include interconnected nodes which perform functionality. However, such feature is known in the art as taught by McKaskle. McKaskle teaches creating graphical program wherein the graphical program has interconnected nodes which perform functionality of the program (col 1, lines 27-31; abstract). Since Sullivan teaches the idea of translating computer programs written in one programming language into another programming language (col 1, lines 10-17), it would have been obvious to one of ordinary skill in the art, having the teaching of Sullivan and McKaskle before him at the time the invention was made, to apply the translation idea taught by Sullivan to graphical programs taught by McKaskle so that McKaskle's graphical program can be translated into another graphical program language.

Regarding claim 49, Sullivan teaches steps for programmatically generating a second program (Java program) based on a first program (COBOL) program, comprising receiving information specifying the first program (see Fig. 2a, reference number 12 Program-ID and reference number 14 Program name), the first program perform first functionality (inherent), wherein the first program is in a first programming language (COBOL language); and programmatically generating (programmatically translating; col 4, lines 37-49), the second program based on the information (col 5, lines 20-28) and the second program implements functionality of the first program (col 11, lines 3-5) wherein the second program is in a second programming language (Java language), wherein the second programming language is different from the first programming language (Java programming language is different from COBOL programming language). Sullivan differs from the claims in that Sullivan does not teach that the first program and the second program can be graphical program which include interconnected nodes which perform functionality. However, such feature is known in the art as taught by McKaskle. McKaskle teaches creating graphical program wherein the graphical program has interconnected nodes which perform functionality of the program (col 1, lines 27-31; abstract). Since Sullivan teaches the idea of translating computer programs written in one programming language into another programming language (col 1, lines 10-17), it would have been obvious to one of ordinary skill in the art, having the teaching of Sullivan and McKaskle before him at the time the invention was made, to apply the translation idea taught by Sullivan to graphical programs taught by McKaskle so that McKaskle's graphical program can be translated into another graphical program language.

Art Unit: 2173

Regarding claim 53, Sullivan teaches steps for programmatically generating a second program (Java program) based on a first program (COBOL) program, comprising receiving information specifying the first program (see Fig. 2a, reference number 12 Program-ID and reference number 14 Program name), the first program perform first functionality (inherent), wherein the first program has first data flow semantics (COBOL language semantics); and programmatically generating (programmatically translating; col 4, lines 37-49), the second program based on the information (col 5, lines 20-28) and the second program implements functionality of the first program (col 11, lines 3-5) wherein the second program has second data flow semantics (Java language semantics), wherein the second data flow semantics is different from the first data flow semantics. Sullivan differs from the claims in that Sullivan does not teach that the first program and the second program can be graphical program which include interconnected nodes which perform functionality. However, such feature is known in the art as taught by McKaskle. McKaskle teaches creating graphical program wherein the graphical program has interconnected nodes which perform functionality of the program (col 1, lines 27-31; abstract). Since Sullivan teaches the idea of translating computer programs written in one programming language (semantics) into another programming language (semantics) (col 1, lines 10-17), it would have been obvious to one of ordinary skill in the art, having the teaching of Sullivan and McKaskle before him at the time the invention was made, to apply the translation idea taught by Sullivan to graphical programs taught by McKaskle so that McKaskle's graphical program can be translated into another graphical program language (semantics).

Regarding claims 2 and 31, Sullivan teaches that second program performs substantially like the first program (equivalent functionality; col 11, lines 3-5).

Regarding claims 3, 32, and 39, Sullivan teaches the first program and the second program implements the first functionality (equivalent functionality; col 11, lines 3-5).

Regarding claims 4, 33, and 40, Sullivan teaches that the second program implements only a portion of the first program (inherent since COBOL and Java are two different languages).

Regarding claim 6, McKaskle teaches that interconnected nodes visually indicate the functionality of the graphical program (Fig. 150 B).

Regarding claims 7, 35, and 42, McKaskle teaches a data flow program (col 1, lines 27-41).

Regarding claims 8, 36, 43, 50, and 54, McKaskle teaches graphical program includes block diagram and user interface (Fig. 150 B).

Regarding claims 9-10, 51-52, and 55-56, McKaskle teaches block diagram and user interface (Fig. 150 B), Sullivan teaches the equivalence of the first and the second program (col 11, lines 3-5).

Regarding claim 12, Sullivan teaches that first program is developed according to a first programming development environment (COBOL) and the second program is programmatically generated (translated) according to a second programming development environment (Java), wherein the second programming development environment is different from the first programming development environment (Java

Art Unit: 2173

programming development environment is different from COBOL programming development environment).

Regarding claim 13, Sullivan teaches that first program is developed according to a first programming language (COBOL) and the second program is programmatically generated (translated) according to a second programming language (Java), wherein the second programming language is different from the first programming language (Java language is different from COBOL language).

Regarding claims 14-15, McKaskle teaches G language (Fig. 77-78).

Regarding claim 16, McKaskle teaches a data flow program (col 1, lines 27-41).

Regarding claim 17, Sullivan teaches when executed, the second program performs functionality of the first program (col 11, lines 3-5).

Regarding claim 18, Sullivan teaches compiling and downloading the second program (col 9, lines 47-56).

Regarding claims 20-21, McKaskle teaches that the first program is LabVIEW program (col 43, lines 13-16).

Regarding claims 22-23, Sullivan teaches that information specifying the first program comprises text information and abstract information (Fig. 2a, Program-ID, Program Name).

Regarding claim 24, Sullivan teaches that information specifying the first program comprises file (Fig. 2a, Program-ID, Program Name).

Regarding claim 28, McKaskle teaches that the program comprises a node (col 1, lines 27-31). Sullivan teaches translating first program to second program.

Regarding claim 29, Sullivan teaches functionality of the first program is equivalent to functionality of the second program (col 11, lines 3-5).

Regarding claim 45, Sullivan teaches information specifying the first program comprises the first program (Fig. 2a).

Regarding claim 46, McKaskle teaches data flow diagram (col 1, lines 27-41; Fig. 150 B).

5. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sullivan, McKaskle, and Lin (6234799).

Regarding claim 19, Sullivan and McKaskle do not teach the program is a Simulink program. However, such feature is known in the art as taught by Lin. Lin teaches the converting a Simulink program to the corresponding C language (col 5, lines 26-34. Since both Sullivan and Lin teach the idea of translating computer programs written in one programming language into another programming language (Sullivan, col 1, lines 10-17) (Lin, col 5, lines 26-34), it would have been obvious to one of ordinary skill in the art, having the teaching of Sullivan and Lin before him at the time the invention was made, to apply the translation steps taught by Sullivan to Simulink program taught with the motivation being apply the translation steps to different programming language.

Allowable Subject Matter

6. Claims 25-27 and 47 would be allowable if rewritten to overcome the objection set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Art Unit: 2173

7. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claims 25-27, Sullivan teaches generating second program based on receiving abstract information describing the first program. Sullivan does not teach limitations "constructing an abstract representation of the first graphical program based on received information specifying the first graphical program" and "programmatically generating the second graphical program comprises programmatically creating the second graphical program based on the constructed representation" in the specific combination as cited in claim 25. These limitations define patentably over prior art of record.

Regarding claim 47, Sullivan teaches generating second program from the first program wherein the first and the second program are having equivalent functionality. Sullivan does not teach the limitation "the first graphical program comprises one or more loops among block diagram node interconnections; wherein the second graphical program does not comprise one or more loops among block diagram node interconnections" in the specific combination as cited in claim 47. These limitations define patentably over prior art of record.

8. The prior art made of record on form PTO-892 and not relied upon is considered pertinent to applicant's disclosure. Applicant is required under 37 C.F.R. § 1.111(c) to consider these references fully when responding to this action. The documents cited therein teach program conversion which relates to the claimed invention.

9. Applicant's arguments filed 05/07/04 have been considered but are moot in view of the new ground(s) of rejection.

Art Unit: 2173

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kieu D. Vu whose telephone number is (703-605-1232).

The examiner can normally be reached on Mon - Thu from 7:00AM to 3:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca, can be reached on (703- 308-3116).

The fax phone numbers for the organization where this application or proceeding is assigned are as follows:

(703)-872-9306

and / or:


(703)-746-5639 (use this FAX #, only after approval by Examiner, for

"INFORMAL" or "DRAFT" communication. Examiners may request that a formal paper / amendment be faxed directly to them on occasions)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703-305-3900).

Kieu D. Vu

07/19/04


RAYMOND J. BAYERL
PRIMARY EXAMINER
ART UNIT 2173